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The present invention provides a linear motor, which can improve motor efficiency and which can be manufactured by a simplified procedure. The linear motor of the present invention includes a movable unit of cylindrical shape and having the central axis at the intersection of the X-axis and the Y-axis. An inner yoke is arranged on an inner side of the movable unit with a given spacing in the radial direction of the movable unit and is formed by laminating a multiple of thin plates each in approximately rectangular in shape and having strong magnetic permeability arranged in the direction of the X-axis. An outer yoke is arranged on the outer side of the movable unit with a given spacing in a radial direction of the movable unit and is formed by laminating a multiple of thin plates, each approximately rectangularly shaped and arranged in the same direction as the thin plates of the inner yoke. A pair of permanent magnets are magnetized in a direction from the inner yoke to the outer yoke. The thrust force of the linear motor is stable and motor efficiency is improved.--